

What is claimed is:

1. A voice interception system for intercepting a voice signal included in an Asynchronous Transfer Mode (hereinafter referred to as "ATM") cell transferred in an ATM Adaptation Layer type 2 (hereinafter referred to as "AAL2") of an ATM network, comprising:

a base station controller;

a mobile switching station comprising:

a plurality of ATM cell assembler/de-assembler units which convert the ATM cell of the AAL2 received from the ATM network through said base station controller to an ATM cell of a modification of the ATM Adaptation Layer type 2 (hereinafter referred to as "AAL2pf") and convert the ATM cell of the AAL2pf to the ATM cell of the AAL2 to send to said base station controller,

a voice monitor which generates an ATM cell of an ATM Adaptation Layer type 1 for reproducing a voice signal (hereinafter referred to as "AAL1 (PCM)") based on the ATM cell of the AAL2pf from said plurality of ATM cell assembler/de-assembler units, and

an ATM switch; and

a third party call apparatus which converts the ATM cell of the AAL1 (PCM) sent from said voice monitor through a Synchronous Transfer Mode (hereinafter referred to as "STM") network to the

voice signal,

wherein said ATM switch sets a first path in which the ATM cell of the AAL2pf from one of said plurality of ATM cell assembler/de-assembler units is sent to another one of said plurality of the ATM cell assembler/de-assembler units, a second path in which the ATM cell of the AAL2pf passing through the first path is drawn into said voice monitor and a fourth path in which the ATM cell of the AAL1 (PCM) from said voice monitor is sent to said the third party call apparatus through said STM network.

2. The voice interception system according to claim 1, wherein the ATM cell of the AAL2pf is equal to the ATM cell of the AAL2 except that the ATM cell of the AAL2pf accommodates one piece of user data therein and does not have a start field.

3. The voice interception system according to claim 2, further comprising:

a vocoder which carrying out a mutual conversion between the ATM cell of the AAL2pf and an ATM cell of an Adaptation Layer type 1 for the Tandem Free Operation (herein after refereed as "AAL1 (TFO)"),

wherein said voice monitor converts the ATM cell of the AAL2pf from said plurality of the ATM cell assembler/de-assembler units to the ATM cell of the

10 AAL1 (PCM) in a non-Tandem Free Operation case and converts the ATM cell of the AAL1 (TFO) from said vocoder to the ATM cell of the AAL1 (PCM) in a Tandem Free Operation case.

4. The voice interception system according to claim 3, further comprising:

an ATM cell multiplexer/demultiplexer which returns the ATM cell of the AAL2pf from said voice

5 monitor back to said voice monitor,

wherein a third path is set in which the ATM cell of the AAL2pf is returned from said voice monitor back to said voice monitor.

5. The voice interception system according to claim 4, further comprising:

a voice interception receiver which intercepts a voice,

5 wherein said ATM switch sets a fifth path in which the voice signal is sent from said third party call apparatus to said voice interception receiver.

6. The voice interception system according to claim 5, wherein all the other paths except the second path are fixedly set at an initially setting stage without intervention of a software control for a call process.

7. The voice interception system according to claim 6, wherein said STM network and said ATM network is connected to each other through the fixedly set paths, and the call process to intercept the voice is carried out based on only a path connection process of said ATM switch.